

Work Order ID 76355

76355

Page 1

November-09-11 2:30:11 PM

Item ID: D350-689-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Dual High Back Seat

Stop

NS2

Start Date: 09/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 25/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: M.L.J

Date: 11/11/09

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
DSI 9498	A								
IIN-D350-689	A								
100	DOCUMENT CONTROL	0.00							
100									
DC	Memo	0.00							
Document Control	Photocopy bluefile and create labels per PPP D350-689-011								
110	Pick Kit	0.00							
110									
Packaging	Memo	0.00							
Packaging									

DAS
16
8-23
CHG005
CHG004

MLJ 12/07/20

12/07/20 JB

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 76355

November-09-11 2:30:11 PM

76355

Page 2

Item ID: D350-689-011

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Dual High Back Seat

Stop

NS2

Start Date: 09/11/2011 Start Qty: 1.00

1

Cust Item ID:

Required Date: 25/11/2011 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

130

Packaging

0.00

130

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D350-689-011

Location:

PPP Rev:

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.00

Quality Control

u 1207.20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November-09-11 2:30:15 PM

Page 1

Work Order ID: 76355

76355

Parent Item: D350-689-011

D350-689-011

Parent Item Name: Dual High Back Seat

Start Date: 09/11/2011

Required Date: 25/11/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:B03.05.09Reformat; Modify Step 1KJ/RF IPP Rev:C chg003
per DSI 9498 DD 10.02.11 verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3018-1 *D3018-1* Seat Cushion		Manufactured	No			110	Each	6.0000	1	77117 JB			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST420A				6					
				69610				2					
				71713				4					
D3019-1 *D3019-1* Seat Cushion		Manufactured	No			110	Each	6.0000	1	77118 JB			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				ST420A				6					
				69614				2					
				71714				4					
D350-689-013 *D350-689-013* Floor Provisions		Manufactured	No			110	Each	2.0000	1	83129 JB			
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				FG010				2					
				70583				2					
D350-689-041 *D350-689-041* Dual High Back Seat Ass'y		Manufactured	No			110	Each	0.0000	1	83129 JB 12/07/20			
										84639			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

SHOP COPY

RETURN TO

ENGINEERING

UNCONTROLLED COPY

SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 76355

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV 0
REF TCCA STC: SH02-33
REF FAA STC: SR01620NY
REF EASA STC: EASA.IM.R.S.01453
REF BRAZILIAN STC: 2005S03-09

PURPOSE:

TO UPDATE THE PARTS LIST AND THE WEIGHT AND BALANCE TABLE IN IIN-D350-689 REV A AND ICA-D350-689 REV 0.

CHANGE:

FOR D350-689-011 AT CHANGE 003, D350-689-021 AT CHANGE 002, D350-689-041 AT CHANGE 002 AND D350-689-043 AT CHANGE 002, QTY (6) OF: MS27039-1-19 SCREW; MS21042L3 NUT & AN960JD10L WASHER REPLACED WITH QTY (6) OF: MS27039-4-21 SCREW; MS21042L4 NUT & NAS1149D0432J WASHER RESPECTIVELY. FIGURE 6 (PG 9) OF IIN-D350-689 MODIFIED PER SHT 2 OF THIS SERVICE INSTRUCTION. THE HARDWARE SECTION OF THE PARTS LIST IN SECTION 5 (PG 10) OF IIN-D350-689 REV A & SECTION 25.6 (PG 31) OF ICA-350-689 REV 0 IS AMENDED AS FOLLOWS:






Qty -011	Qty -013	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X						D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X					D350-689-013	FLOOR PROVISIONS KIT
		X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH (REF DSI 9419)
		1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISION KIT (REF DSI 9419)
1				X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
		1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY (REF DSI 9419)
	6			17	17	NAS1149D0332J	WASHER (OR AN960JD10L)
			9			NAS1149D0363J	WASHER (OR AN960JD10)
				6	6	NAS1149D0432J	WASHER (OR AN960JD416)
				3	3	AN3-12A	BOLT
	16					MS20426AD3-6	RIVET
			14			MS20426AD4-5	RIVET
	17					MS20426AD4-6	RIVET
	18		34			MS20470AD4-5	RIVET
	2		18			MS20470AD4-6	RIVET
	30		32			MS20470AD5-6	RIVET
				40	40	MS20600AD4W2	RIVET
				6	6	MS20600AD4W3	RIVET (REF DSI 9349)
	8					MS21059L3	NUTPLATE
	6					MS27039-1-10	SCREW
				4	4	MS27039-1-17	SCREW
				6	6	MS27039-1-19	SCREW
				6	6	MS27039-4-21	SCREW
				4	4	MS24693-S272	SCREW
	2					MS24693-S273	SCREW
					8	MS24694-S3	SCREW
			9			MS24694-S50	SCREW
					4	MS24694-S148	SCREW
			9	17	17	MS21042L3	NUT (OR MS21042-3)
				6	6	MS21042L4	NUT (OR MS21042-4)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: 
D. SHEPHERD (DE # 02)

DATE: 10.01.21
CERT. NO.: SH02-33
ISSUE NO.: 1

A	NEW ISSUE.	JPH	10.01.21
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9498	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SEAT REINF; IIN & ICA UPDATE	NTS
DATE	10.01.21	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

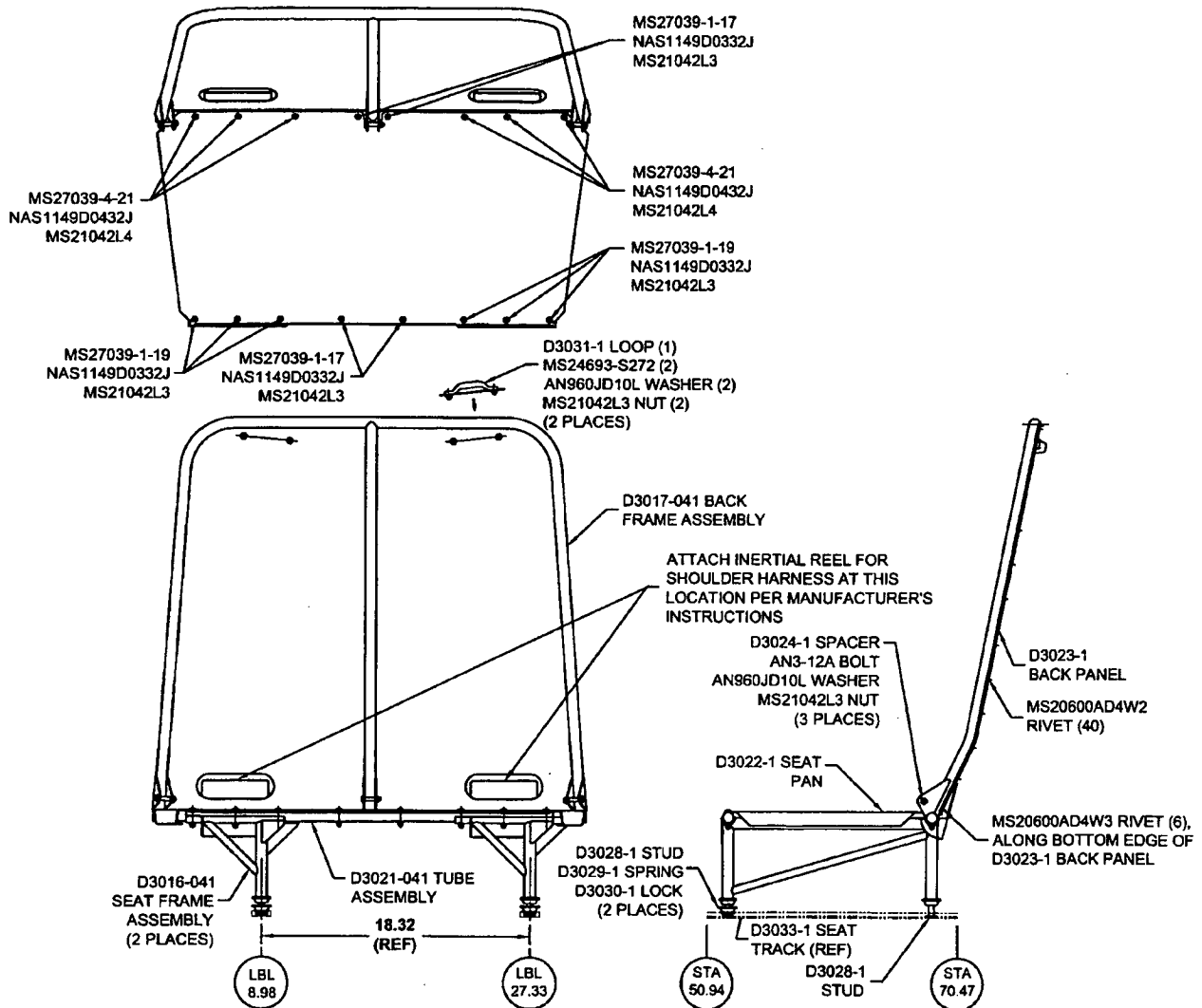
NOTE: Date & initial all entries

76355

CHANGE:

THE FOLLOWING WEIGHT AND BALANCE INFORMATION IS FOR THE D350-689-011 DUAL HIGH BACK SEAT AT CHANGE 003 (OR LATER) AND THE D350-689-021 DUAL HIGH BACK SEAT AT CHANGE 002 (OR LATER).

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-689-011	27.6 lb	-18.2 in	-502 in-lb	60.7 in	1675 in-lb
Dual High Back Seat Installation	12.5 kg	-0.46 m	-5.8 m-kG	1.54 m	19.3 m-kG
D350-689-021 Dual High Back Seat	29.2 lb	-18.2 in	-531 in-lb	60.7 in	1772 in-lb
Installation, LH Fwd Position	13.2 kg	-0.46 m	-6.1 m-kG	1.54 m	20.3 m-kG
D350-689-021 Dual High Back Seat	29.2 lb	-18.2 in	-531 in-lb	64.7 in	1889 in-lb
Installation, LH Aft Position	13.2 kg	-0.46 m	-6.1 m-kG	1.64 m	21.6 m-kG



REF FIGURE 6 (IIN-350-689)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-Q-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.01.21
CERT. NO.: SH02-33
ISSUE NO.: 1

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9498	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SEAT REINF; IIN & ICA UPDATE	NTS
DATE	10.01.21	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

4. WEIGHT AND BALANCE

The following weight and balance information is for the Dart Dual High Back Seat Installation. The weight and balance of the parts that are removed from the aircraft to perform this installation are the responsibility of the installer.

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-689-011 Dual High Back Seat Installation, Fwd Position	27.6 lb 12.5 kg	-18.2 in -0.46 m	-502 in-lb -5.8 m-k-g	60.7 in 1.54 m	1675 in-lb 19.3 m-k-g
D350-689-013 Floor Provisions Kit, Fwd Position	2.0 lb 0.9 kg	-18.2 in -0.46 m	-36 in-lb -0.4 m-k-g	60.7 in 1.54 m	121 in-lb 1.4 m-k-g
D350-689-011 Dual High Back Seat Installation, Aft Position	28.1 lb 12.7 kg	-18.2 in -0.46 m	-511 in-lb -5.8 m-k-g	63.7 in 1.62 m	1790 in-lb 20.57 m-k-g
D350-689-013 Floor Provisions Kit, Aft Position	3.1 lb 1.4 kg	-18.2 in -0.46 m	-56 in-lb -0.6 m-k-g	62.2 in 1.58 m	193 in-lb 2.2 m-k-g
D350-689-015 Seat Modification Kit	1.0 lb 0.5 kg	-17.2 in -0.44 m	-17 in-lb -0.22 m-k-g	60.7 1.54 m	61 in-lb 0.77 m-k-g
D350-689-017 Shoulder Harness, Fwd Position	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-k-g	60.7 in 1.54 m	267 in-lb 3.08 m-k-g
D350-689-017 Shoulder Harness, Aft Position	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-k-g	64.7 in 1.64 m	285 in-lb 3.28 m-k-g
D350-689-019 Control Guard, Fwd Position	0.5 lb 0.23 kg	-9.0 in -0.23 m	-4.5 in-lb -0.05 m-k-g	60.7 in 1.54 m	30 in-lb 0.35 m-k-g
D350-689-019 Control Guard, Aft Position	0.5 lb 0.23 kg	-9.0 in -0.23 m	-4.5 in-lb -0.05 m-k-g	64.7 in 1.64 m	32 in-lb 0.38 m-k-g
D350-689-021 Dual High Seat Back Installation, LH Fwd Position	29.2 lb 13.2 kg	-18.2 in -0.46 m	-531 in-lb -6.1 m-k-g	60.7 in 1.54 m	1772 in-lb 20.3 m-k-g
D350-689-021 Dual High Seat Back Installation, LH Aft Position	29.2 lb 13.2 kg	-18.2 in -0.46 m	-531 in-lb -6.1 m-k-g	64.7 in 1.64 m	1889 in-lb 21.6 m-k-g
D350-689-023 Energy Attenuating Floor Provisions Kit	2.5 lb 1.1 kg	-18.2 in -0.46 m	-46 in-lb -0.5 m-k-g	62.2 in 1.58 m	156 in-lb 1.7 m-k-g

5. PARTS LIST

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
X									D350-689-011	DUAL HIGH BACK SEAT INSTALLATION, LH
1	X								D350-689-013	FLOOR PROVISIONS KIT
		X							D350-689-015	SEAT MODIFICATION KIT
			X						D350-689-017	SHOULDER HARNESS KIT
				X					D350-689-019	CONTROL GUARD KIT
					X				D350-689-021	DUAL HIGH BACK SEAT INSTALLATION, LH
					1	X			D350-689-023	ENERGY ATTENUATING FLOOR PROVISIONS KIT
1							X		D350-689-041	DUAL HIGH BACK SEAT ASSEMBLY
					1			X	D350-689-043	DUAL HIGH BACK SEAT ASSEMBLY
							2	2	D3016-041	SEAT FRAME ASSEMBLY
							1	1	D3017-041	BACK FRAME ASSEMBLY
1					1				D3018-1	SEAT CUSHION
1					1				D3019-1	BACK CUSHION
							1	1	D3021-041	TUBE ASSEMBLY
							1	1	D3022-1	SEAT PAN
							1	1	D3023-1	BACK PANEL
							3	3	D3024-1	SPACER
	1								D3025-1	BEAM

• COPYRIGHT © 2011 BY DART AEROSPACE LTD. •
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: B

Date: 11.07.22

Qty -011	Qty -013	Qty -015	Qty -017	Qty -019	Qty -021	Qty -023	Qty -041	Qty -043	Part Number	Description
	1					1			D3026-1	CHANNEL
	1								D3027-1	CLIP
	1								D3027-3	CLIP
	1								D3027-5	CLIP
	4					4			D3027-7	CLIP
							4		D3028-1	STUD
		2					2		D3029-1	SPRING
		2					2		D3030-1	LOCK
							2	2	D3031-1	LOOP
	1								D3032-1	SPACER
	2	1							D3033-1	SEAT TRACK
		4							D3059-1	STUD
		4							D3060-1	BUSHING
		4							D3061-1	RADIUS BLOCK
				1					D3084-3	STRUT
	1								D3234-1	DOUBLER
	1					1			D3234-3	DOUBLER
	2								D3234-5	SPACER
								2	D3808-041	SEAT RAIL ASSEMBLY
								4	D3809-1	SLIDING BLOCK
						1			D3811-041	SEAT TRACK ASSEMBLY
			2						D4071-041	SHOULDER HARDNESS ASSY
							3	3	AN3-12A	BOLT
				1					AN4-12A	BOLT
				1					AN4-20A	BOLT
			2						AN5-4A	BOLT
							40	40	MS20600AD4W2	RIVET
							6	6	MS20600AD4W3	RIVET
						9	17	17	MS21042L3	NUT (OR MS21042-3)
				2			6	6	MS21042L4	NUT (OR MS21042-4)
		4	2						MS21042L5	NUT (OR MS21042-5)
	12	4							MS21059L3	NUTPLATE
							4	4	MS24693-S272	SCREW
	2	1							MS24693-S273	SCREW
								8	MS24694-S3	SCREW
						9			MS24694-S50	SCREW
							4		MS24694-S148	SCREW
	6	3							MS27039-1-10	SCREW
							4	4	MS27039-1-17	SCREW
							6	6	MS27039-1-19	SCREW
							6	6	MS27039-4-21	SCREW
	6	3					17	17	NAS1149D0332J	WASHER (OR AN960JD10L)
						9			NAS1149D0363J	WASHER (OR AN960JD10)
				8					NAS1149D0416J	WASHER (OR AN960JD416L)
							6	6	NAS1149D0432J	WASHER (OR AN960JD416)
			4						NAS1149D0516J	WASHER (OR AN960JD516L)
		4							NAS1149D0563J	WASHER (OR AN960JD516)
				2					NAS43DD4-46N	SPACER

• COPYRIGHT © 2011 BY DART AEROSPACE LTD •

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Revision: B

Date: 11.07.22

Change Record

Part Number D380-689-011
Description DUAL IN BACK SEAT INSTALLATION, LH

Page 1 of 1

Chg.	Date	By	Relevant Documents
001	01.08.05	DS	PER DR-D3SD-689 REV. A
002	05.10.05	CP	PER DR-D3SD-689 Rev E & DSI 9311 RevA
003	10.02.10	DS	DS19498 Rev.A, D3016 (DEO) Rev.A, D3017 Rev.B (ECN 10-504)
004	11.05.18	DS	D3025 Rev.B, D3026 Rev.C (ECN 11-576)
005	11.11.23	DS	D3234 Rev.C (ECN 11-674)